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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

JENNINGS, STEPHANIE M

ART UNIT

PAPER NUMBER

3725

MAIL DATE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/585,986	Applicant(s) KEMMOCHI ET AL.	
	Examiner Stephanie Jennings	Art Unit 3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 2,6,8,9,11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7,10 and 12-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 February 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see pages 1-7, filed September 30, 2009, with respect to the rejection(s) of claim(s) 1, 3-5, 7, 10, 12-20 under 35 USC 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly found prior art in light of applicant's amendments. Adjustable pinch rollers are well-known in the art.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1, 5, 7, 12-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamura et al. US Patent No. 6,742,363 in view of Lipowski US Patent No. 4,650,380, Doudet US Patent No. 4,386,513, Nordlof US Patent No. 4,594,872, and Japanese Patent Publication 57-121810 A.

5. In regard to claims 1 and 5, Yamamura discloses a method of elongating optical fiber base material (102) wherein a base material ingot (102) is heated and softened in a heating means (176) (column 2, lines 26-34).

6. Yamamura does not disclose does not teach such a method with roller grooves with a curvature radius larger than the base material rod.

7. In regard to claims 1, 5, and 19, Doudet teaches drawing said ingot with a pair of pinch rollers; and elongating the ingot to make base material rod having including a smaller diameter than said ingot, wherein a roller groove (63) of said pinch rollers includes one of a curvature radius which is greater than the outer diameter of said base material rod (64) and a pair of pinch rollers which draws, and elongates the ingot to make a base material rod having including a smaller diameter than the ingot said pair of pinch rollers comprised of metal (column 4, lines 38-52).

8. It would have been obvious to one skilled in the art to provide Yamamura's device with the features of Doudet's invention because designing the roller groove with with a curvature radius ensures a proper fit as the rod will fit securely in the roller groove.

9. Neither Yamamura nor Doudet teaches a V-shaped roller groove.

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10. In regard to claims 1, 5, 18, and 20, Lipowski teaches a V- shaped roller groove with a cross section including straight lines formed on each surface of said pinch rollers comprised of metal, and wherein the facing roller grooves respectively formed on the surfaces of a pair of said pinch rollers nip and draw said base material rod (column 8, lines 36-47 and column 9, lines 9-17).

11. It would have been obvious to one of ordinary skill in art to combine Yamamura's invention with Lipowski's invention because the V-shaped roller groove ensures a proper fit for the rollers.

12. Neither Yamamura, Doudet, nor Lipowski teaches a positioning the pinch rollers in a straight line.

13. In regard to claims 1 and 5, Nordlof teaches using a screw (195) to adjust a set of pinch rollers in a straight line (column 7, lines 1-27).

14. It would have been obvious to one skilled in the art to provide the device of Yamamura in view of Doudet and Lipowski with the adjustable pinch rollers of Nordlof because adjustable pinch rollers allow for modular adjustment of the pinch rollers during operation.

15. In regard to claim 7, Doudet teaches the apparatus for elongating optical fiber base material (102) according to claim 5, wherein the surfaces of said pinch rollers (142) are winded and fixed woven fabric made comprising of heat-resistant material to prevent said pinch rollers (142) from directly contacting to base material rod made comprising of metal (column 10, lines 26-28, 36-41).

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16. In regard to claims 12, 13, 16, and 17, Doudet teaches the apparatus of claim 5, wherein a surface of said pinch rollers include concave grooves for stably nipping the base material rod mounted on a position adjustment table via a mechanical reference level included in an untapered shaft, and woven fabric comprised of heat-resistant material is wound and fixed around the surface of the pinch rollers (column 10, lines 26-28, 36-41).

17. In regard to claim 14, Nordlof teaches the method of claim 1, wherein the pinch rollers adjust position such that a straight line connecting a central axis of the heating means with the groove center of the roller grooves respectively formed on the surfaces of the pair of pinch rollers is parallel to the traveling direction of the base material ingot (column 7, lines 1-27).

18. In regard to claim 15, Nordlof teaches pinch rollers adjust position such that a straight line connecting a central axis of the heating means with the groove center of the roller grooves respectively formed on the surfaces of the pair of pinch rollers is parallel to the traveling direction of the base material ingot (column 7, lines 1-27).

19. Claims 3, 4, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamura and Lipowski as applied to claims 1 and 5 above, and further in view of Japanese Patent Publication 57-121810 A .

20. Yamamura teaches a method and apparatus for elongating an optical base fiber with a set of pinch rollers and electric furnace, but does not teach a laser positioning system.

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21. In regard to claim 3, Japanese Patent Publication 57-121810 A teaches a positioning adjustment apparatus supporting said pinch rollers adjusts the position of the apparatus using one of a vertical line of laser beam and a plumb bob, which is parallel to the traveling direction of the base material ingot, runs through the middle of the heating means and the center point of the shorter rod, to determine the positions of said pinch rollers (abstract, constitution).

22. In regard to claim 4, Japanese Patent Publication 57-121810 A teaches a method of elongating optical fiber base material according to claim 1, wherein a jig comprising an upper board and a cylindrical part is mounted on a pair of pinch rollers, and a positioning adjustment apparatus supporting said pinch rollers adjusts the position of the apparatus using a vertical line of laser beam or a plumb bob, which is parallel to the traveling direction of the base material ingot, runs through the middle of the heating means and the center point of the shorter rod, to determine the positions of said pinch rollers.

23. In regard to claim 10, Japanese Patent Publication 57-121810 A teaches a method of elongating optical fiber base material according to claim 3, wherein a jig comprising an upper board and a cylindrical part is mounted on a pair of pinch rollers, and a positioning adjustment apparatus supporting said pinch rollers adjusts the position of the apparatus using a vertical line of laser beam, which is parallel to the traveling direction of the base material ingot, runs through the middle of the heating means and the center point of the shorter rod, to determine the positions of said pinch rollers (abstract, constitution).

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24. It would have been obvious to one skilled in the art to combine the invention of Japanese Patent Application Publication 57-121810 A with Yamamura's invention because it is well-known in the art that the use of a laser positioning system provides accuracy in the optical fiber manufacturing process by providing a correction means for the pinch rollers, therefore minimizing potential defects that could occur during processing.

Conclusion

25. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephanie Jennings whose telephone number is (571) 270-7392. The examiner can normally be reached on Monday-Thursday, 7 am - 5:30 pm EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dana Ross can be reached on (571) 272-4480. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dana Ross/
Supervisory Patent Examiner, Art Unit 3725

/S. J./
Examiner, Art Unit 3725